Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (Currently Amended) A semiconductor structure comprising:

an active layer island of a semiconductor material, said active layer island including a

plurality of sidewalls and a strained region;

a substrate handle wafer; and

an insulating layer disposed between said active layer island and said substrate handle

wafer, said insulating layer containing a thickened region underlying said strained region, said

insulating layer electrically isolating said island of said semiconductor material from said handle

wafer, and said thickened region transferring tensile stress to said strained region.

2. (Currently Amended) The semiconductor structure of claim 1 wherein said insulating layer is

a buried oxide layer and said active layer island is silicon.

3. (Currently Amended) The semiconductor structure of claim 1 further comprising:

a source defined in said active layer island;

a drain defined in said active layer island; and

a channel defined in a portion of said active layer island between said source and said

drain, said channel disposed at least partially in said strained region of said active layer island.

4. (Currently Amended) The semiconductor structure of claim 3 further comprising:

a gate electrode electrically isolated from said portion of said active layer island defining

said channel.

5. (Original) The semiconductor structure of claim 4 wherein said strained region divides said

gate electrode.

6. (Original) The semiconductor structure of claim 4 wherein said gate electrode generally

overlies said channel.

7. (Currently Amended) The semiconductor structure of claim 1 further comprising:

a semiconductor device fabricated using said active layer island.

8. (Currently Amended) The semiconductor structure of claim 1 wherein said active layer island

is silicon and said thickened region of said insulating layer is formed by oxidation of said active

layer island.

9. (Original) The semiconductor structure of claim 9 wherein said insulating layer is silicon

dioxide.

10. (Currently Amended) The semiconductor structure of claim 9 wherein said substrate handle

wafer is silicon and said thickened region is formed by oxidation of said substrate handle wafer.

11. (Original) The semiconductor structure of claim 1 wherein said tensile stress is effective to

enhance carrier mobility within said strained region.

12. (Original) The semiconductor structure of claim 1 wherein a thickness of said thickened

region is increased by an increment in the range of about 5 nanometers to about 10 nanometers.

Page 4 of 9 Serial No. 10/814,482 Amendment and Response dated August 9, 2006 13. (Original) The semiconductor structure of claim 1 wherein said thickened region of said

insulating layer has a thickness greater than that of surrounding regions of said insulating layer

flanking said thickened region.

14. (Currently Amended) The semiconductor structure of claim 1 further comprising:

first and second anchors flanking said strained region, said first and second anchors

effective for limiting relaxation of said strained region of said active layer island.

15. (Currently Amended) The semiconductor structure of claim 16 wherein said first and

second anchors comprise adjacent regions of said active layer island flanking said strained

region.

16-34. (Cancelled)